

## ABSTRACT OF THE DISCLOSURE

A lattice dividing unit 911 determines lattice lines to divide parameters of all points of a picture at every division and supplies distortion correction parameters (distortion correction coordinates) on the lattice points to a distortion correction memory (not shown). A polynomial of degree  $n$  coefficient deriving unit 902 expresses all distortion correction coordinates on each lattice line in the form of a function relative to positions on lattice lines and approximates the distortion correction coordinates by desired division polynomial of degree  $n$ . Further, a sample point deriving unit 903 compresses distortion correction parameters based upon the division polynomial of degree  $n$  obtained from the polynomial of degree  $n$  coefficient deriving unit 902. In the derived division polynomial of degree  $n$ , internal points which result from dividing both ends of the division polynomial of degree  $n$  by  $n$  is supplied to the distortion correction memory as new distortion correction parameters (approximated distortion correction coordinates). Thus, a memory capacity of a required memory can be reduced in the image processing for correcting distortion of an image.